

## ABSTRACT

A method of plasma doping in which dilution of  $B_2H_6$  is maximized for enhanced safety and stable plasma generation and sustention can be carried  
5 out without lowering of doping efficiency and in which the amount of dopant injected can be easily controlled. In particular, a method of plasma doping characterized in that  $B_2H_6$  gas is used as a material containing doping impurity while He is used as a substance of high dissociation energy and that the concentration of  $B_2H_6$  in mixed gas is less than 0.05%.